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OBSERVATIONS

ON

Dr. *CADOGAN*'s

DISSERTATION

ON THE

GOUT

AND ALL

CHRONIC DISEASES.

BY

WILLIAM FALCONER,

OF *BATH*, M. D.

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PREFACE.

THE Author of the following Treatiſe is fully conſcious of the difficulty and hazard of attacking a work which has acquired ſo great a degree of eſtimation in the learned world as Dr. CADOGAN's Diſſertation. The number of editions, thro' which it has in a ſhort ſpace paſſed, are undoubted evidences of the high opinion in which it has been held. Nor does the Author of the following ſheets mean to inſinuate that ſuch reputation has been unjuſtly acquired. The cauſes of chronical diſorders, (the gout particularly) and the means of cure, have been

been deſcribed and pointed out in a manner at once elegant and inſtructive. In this reſpect, the Author has certainly great merit, as he has, without debaſing the ſubject, adapted his arguments to the level of common underſtandings, and happily avoided that pedantic ſtyle for which books of phyſic are but too remarkable. He is likewiſe poſſeſſed of a moſt elegant and perſuaſive manner of delivering his precepts and inſtructions, and has very properly endeavoured to enſure obedience to ſome of the *moſt important of them*, by arguments drawn from reaſon to prove that it is the intereſt of mankind to obſerve them.

It muſt likewiſe be acknowledged, that his general poſitions concerning the uſe of temperance, peace of mind, and exerciſe, to preſerve health, which (tho' not new diſcoveries

ries in medicine) he has certainly great merit in enforcing with ſuch ſpirit and energy, are undoubtedly juſt, and will remain unimpeached ſo long as phyſic continues to be practiſed on a rational footing. Yet I cannot help thinking, notwithſtanding, that the book contains ſeveral very capital errors, and ſome of them likely to be of dangerous conſequence to the health of mankind. To point theſe out in general is the intent of the following treatiſe, and thoſe more particularly in which health is thought to be more immediately concerned.

The Author hopes the enſuing obſervations will not be thought to be written with a captious intention, ſince they never would have appeared, if the work on which they were made had been written on a ſubject of leſs immediate importance to the public welfare.

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He is fully conſcious of its inferiority to Dr. Cadogan in many reſpects, yet nevertheleſs is in hopes that the importance of the ſubject will procure a candid hearing to his arguments, which, though he does not alledge to be concluſive, he cannot help thinking merit conſideration.

If the Author's ſentiments concerning them are well founded, it will be a ſufficient apology for their thus appearing in the world.

DR.

OBSERVATIONS

ON

Dr. CADOGAN's Diſſertation.

THE firſt poſition laid down by the Author is, "that mankind bring all chronical complaints upon themſelves by their own indulgences, exceſſes, or miſtaken habits of life, or by ſuffering their paſſions to lead them aſtray, or diſturb their peace of mind," &c.* Were this poſition true of chronic diſeaſes, I ſee no reaſon why it might not with equal propriety be extended to acute diſeaſes likewiſe, ſince the latter may, with at leaſt equal certainty, be traced to their origin, and depend as much on ourſelves as the former.

* P. 12.—Dr. CADOGAN on the Gout and other Chronic Diſeaſes.

THUS I am inclined to believe, that the cauſe of a Fever may, with more certainty and more frequency, be traced to our own miſmanagement or intemperance, than either the gout or ſtone, or indeed any chronical complaint whatſoever. But our Author ſeems to think, that the common notions which have been received concerning the cauſes of diſorders are ill-founded,---" that thoſe commonly aſſigned, ſuch as accidental colds,* particularities of conſtitution, (by which I imagine he means Idioſyncraſies,) food diſagreeing with or ſurfeiting the ſtomach, are cauſes too trifling to produce diſeaſes that commonly laſt for life. He thinks that there muſt be ſomething more permanent and conſtant in our daily habits, to produce ſuch inveterate evils."

THAT diſorders have been often attributed wrongfully to theſe and other cauſes, to cover ignorance or excuſe intemperance, is but too true; yet I cannot ſtill allow them to

* Vide page 12.

to be diſcarded from the number of cauſes that produce chronic diſorders as well as acute ones.

Our judgment concerning the effect that any particular thing or circumſtance will have upon our health is extremely limited, and varies ſo greatly at different times, according to the different ſtates of the body, that it is almoſt impoſſible to decide ſatisfactorily upon it. Many cauſes which may appear to our judgment trivial and inefficacious, are capable of bringing about great changes in the human frame, which frequently continue after the original cauſe had ceaſed to act; and this is confirmed and accounted for by daily obſervation of the amazing effects of habit and cuſtom. This is exemplified in numberleſs inſtances in medicine, but in none more remarkably than thoſe complaints commonly called *nervous*, where we often ſee a paroxyſm excited by ſome accidental cauſe, as a violent agitation of mind, &c. returning at certain intervals during

during life, though the exciting cauſe had long ceaſed* and been never repeated.

SUDDEN cold is frequently the cauſe of paralytic and rheumatic diſorders; the former of which ought certainly to be accounted a chronical complaint, and the latter very frequently becomes ſo.

PARTICULARITIES of conſtitution likewiſe (if I underſtand the Doctor right) ſometimes lay the foundation of chronical diſorders. I have heard from good authority of a perſon who had for many years an habitual periodic colic, which was brought on by eating a quantity of honey, to which he had a peculiar averſion. Whoever conſiders the nervous ſyſtem (as it probably ſeems to be) as the great foundation both of health and diſorder, its extreme delicacy, our ignorance of the manner in which it is connected with the reſt of the ſyſtem and of the manner in which

* HUFFMAN relates numberleſs inſtances of epileptic fits, which had their origin from cauſes of this kind, continuing during life.

which it is affected, the ſubſtances which act upon it, and how theſe effects are varied in different ſubjects, and in the ſame ſubject at different times and in different circumſtances, will, I truſt, have no great difficulty in aſſenting to the truth of this obſervation. Thus we often ſee people eſcape unhurt from exceſſes, which we ſhould expect would prove fatal to them, while on the other hand an indulgence, ſeemingly the moſt trifling, evidently lays the foundation of the moſt inveterate malady. This might be exemplified by a thouſand inſtances that occur in daily obſervation.

I CANNOT, moreover, by any means agree with our Author in his opinion, "that all our diſorders of any kind whatever are *undoubtedly* owing to ourſelves."

I AM the more ſurprized that a man of the knowledge of Dr. Cadogan ſhould make a peremptory aſſertion, contrary to medicine and philoſophy, and what daily

experience

experience contradicts. That the cauſes he aſſigns for diſorders, viz. *intemperance*, *indolence*, and *vexation*, produce many diſorders, and aggravate all, has been never doubted; but I am well ſatisfied that it is equally true, that diſeaſes are incident to human nature, and that any medicine or mode of living, that ſhould promiſe to keep us certainly free from diſorder, would be as little to be confided in as one that was to promiſe immortality itſelf. Nor is this any reflection on our nature. Imperfection in health, body, and mind, is a characteriſtic of human nature. And ſurely it cannot be thought irrational to ſuppoſe, that as no means can prolong life beyond a certain period, that none can obviate the previous ſigns of its tendency to diſſolution. Various methods of life are the cauſes of various diſorders, but none has been as yet diſcovered that will effectually preſerve us from any. Nations have varied greatly in their manner of living, yet it does not ſeem to have had in general

* Page 16.

general any remarkable effect either in prolonging or abridging the date of their life: and though ſome inſtances are brought of great longevity and continued courſe of health, cauſed by a regular and temperate manner of life, we daily ſee examples where that has been rigorouſly complied with, and yet been found inſufficient to procure it; and inſtances of a contrary kind have been produced, where health and long life have been found to conſiſt with the greateſt exceſſes.

It is hoped, that what is here ſaid will not be miſinterpreted into an inſinuation that our diet and manner of life are things indifferent to health.

There is no doubt that regularity and temperance are at leaſt as rational means to purſue for the eſtabliſhing or reſtoring our health, as induſtry and œconomy to our fortune; yet no one can deny that even in the latter caſe they are ſometimes both ineffectual.

The Author next paſſes from chronical diſeaſes in general to a particular one, viz. *the Gout*, which he takes as a ſpecimen* of all the reſt. I ſhall not diſpute with the Doctor concerning its nature, but proceed to examine ſome of the poſitions he has laid down concerning it. Theſe are in number three, and are as follow :†

1. It is not hereditary;
2. It is not periodical;
3. It is not incurable.

As to the firſt of theſe, if authorities were of any weight, almoſt every medical writer, from the days of Hippocrates to the preſent time, may be cited for a different opinion. A fact ſo directly in contradiction to the experience of former ages, would require very ſtrong arguments to ſupport it, or even excuſe its being publicly aſſerted. Were it a mere matter of theory, the caſe would be different; but as this is a thing which can be determined by obſervation only,

* Page 16. † Page 17.

only, I cannot help thinking ſome more caution would have been proper. But the Doctor's idea of its being hereditary ſeems to be a very extraordinary one. He ſays, " that if it were hereditary, no man whoſe father had it could poſſibly be free from it." But this is by no means the idea that has been affixed to the word by medical writers, who never pretended to underſtand by it a phyſical neceſſity, but only a great degree of moral probability. He indeed ſeems to allow, that the father's " having it inclines or prediſpoſes the ſon to it;" but then he allows this " to be a prediſpoſing cauſe only, which he ſays of itſelf never produced any effect at all." This is by much too ſubtile a diviſion to hold univerſally. Cauſes which in ſome caſes and circumſtances are only prediſponent, in others become both prediſponent and occaſional; and the very prediſpoſing cauſe itſelf, when increaſed to a certain degree, becomes an occaſional one likewiſe. But the Doctor ſays*, " if it were hereditary it would appear in infancy and women,

* Page 18.

women, which in general it does not." This by no means follows. The gout when in its natural ſtate (if the expreſſion may be allowed of) is not a diſorder of infancy, or, in general, of the female ſex. 'Tis ſufficient to denominate it hereditary, if it is found that thoſe males who have a parental claim to it are ſubject to it at a certain time of life. If the conſtitution of females and infants be not adapted to receive the diſorder, 'tis as abſurd to argue againſt its being hereditary becauſe they are not affected by it, as it would be to aſſert that the diſorder among the horned cattle was not contagious, becauſe ſheep and horſes were not infected by it. On this account I cannot allow the Doctor's ſubſequent reaſoning to be juſt, where he ſays, that " they who argue that the gout is hereditary, becauſe they ſee it ſo ſometimes, argue very inconcluſively, ſince if we compute the number of children who have it not, and of women who have it not, together with all thoſe active and temperate men who have it not, though born of gouty parents, the proportion will be found at

leaſt an hundred to one." But if the caſe be ſtated as it ought to be, and an enquiry made whether thoſe males that were born of gouty parents, and thoſe eſpecially which were begotten after their parents had begun to be affected with the gout, had it not themſelves at a certain period of life, I ſuſpect the computation would vary exceedingly. Different diſorders make their appearance at different ſtages of life, and I am no more ſurprized at a young child's not being afflicted with the gout, than I am that a grown-up perſon does not ſuffer from breeding teeth.

Had the ancient writers looked on this affair in the ſame light with Dr. Cadogan, they would ſcarcely have delivered it as their opinion, that the gout was an hereditary complaint; and though the ſuperiority of the moderns in ſome reſpects cannot be denied, the merit of accurate obſervation muſt be allowed to the ancients.

ARETÆUS and Cælius Aurelianus, who were moſt celebrated for judgment and accurate obſervation, both expreſsly affirm the gout to be hereditary; and numberleſs paſſages might be quoted from other ancient medical writers, to prove that they were of the ſame opinion. Nor indeed do the later of the modern writers, as far as I can find (Dr. Cadogan excepted) pretend to deny it. Sydenham, whoſe merit in obſervation is unparallelled, ſpeaks of it expreſsly as inherited from gouty parents, and Boerhaave and Hoffman concur in the ſtrongeſt terms in the ſame ſentiment.

NOR is it an abſurdity to call a diſorder hereditary, altho' it ſhould not appear in every branch of the family that we might ſuppoſe to have inherited it. It is ſufficient, if it be generally preſent. Different conſtitutions and methods of life may alter the nature of the diſorder, or entirely ſubdue it in them, though it may make its appearance in another generation. This is

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mentioned expreſsly by Boerhaave, where he ſays, ſpeaking of the cauſe of the gout, "ſequi ſolet---hæreditatem in ſcros nepotes, per parentem ſæpe nondum podagricum, ſed tantum labe genitali damnoſum genitæ proli."*

To ſay that the gout is not hereditary, becauſe it does not always deſcend to poſterity, would be equally abſurd, as to aſſert, that the ſucceſſion to the crown of theſe realms was not hereditary, becauſe its regularity had been ſometimes interrupted. The ſcrophula and madneſs† the Doctor allows to be hereditary complaints, and ſuch as (although chronical ones) we do not always bring upon ourſelves. Yet he will ſcarce aſſert, that all the progeny of thoſe affected in this manner, are either ſcrophulous or inſane. The latter of theſe might be brought as an inſtance againſt a former argument of his, as that diſorder, though often hereditary, ſeldom appears until a certain period of life. But

* Boerhaave's Aphoriſms.

† Page 19.

But what are we to underſtand by the other diſorders which the Doctor allows to be hereditary, viz. "diſeaſes of taint or infection, and maleformation." The only diſorder that I know of the contagious kind, that we can ſafely ſay is communicated to poſterity, is the venereal diſeaſe; and this, it muſt be owned, frequently proves in this caſe incurable. Yet this does not ſeem owing to any peculiar virulence of the diſorder, but to the debilitated ſtate of the infant, which in general ſcarce lives a ſufficient time for the medicines to work a cure. Where ſufficient ſtrength remained to maſter the other complaints, this has not been found incurable.

As to maleformation, I can underſtand by it nothing but misſhapeneſs, and this I ſhould leaſt of any ſuppoſe to be an hereditary complaint. Children, it muſt be owned, often reſemble their parents in their ſhape and make, as well as mind and diſpoſition; but this is ſcarce ever carried

to the length of a diſeaſe or deformity. Nor indeed can any reaſon be aſſigned, why a father with a hump back, or bandy legs, may not have children ſtraight and well ſhaped. It muſt be owned, we ſometimes ſee ſeveral children of the ſame family miſ-ſhapen and deformed; and I hope this was more frequently to be met with in the laſt generation than it is likely to be in the preſent; but I believe, if this was to be examined, it would be found oftener owing to the miſmanagement of thoſe who had the care of them when young than any hereditary diſpoſition. I am ſure that in the preſent age, by prudent management, and moſt of all by not interfering with nature, the ſhape of mankind is in general improved greatly; and I doubt not that many of the bad ſhapes reſembling one another, which we ſometimes uſed to ſee in the ſame family, were owing to the ſame aukward means being uſed with each to improve them.

But the Doctor ſubjoins--*" If the gout be a diſeaſe of indigeſtion, and therefore of our own acquiring, we muſt reaſon very ill, or rather not reaſon at all, when we ſay it is hereditary; for, ſurely, no man will ſay that indigeſtion is hereditary, any more than intemperance." Whether the gout be of this nature, or no, I ſhall not here enquire; but even granting it to be ſo, I really can by no means comprehend the force of this reaſoning, or perceive any analogy in this caſe between intemperance and indigeſtion. The former is always owing to ourſelves, the latter not ſo: But what reaſon can be aſſigned why an habitual weakneſs of the ſtomach, which is often owing to an over ſenſibility of the nerves of it, may not be inherited from a parent, as well as face, ſhape, or diſpoſition? If we ſee, as we often do, a reſemblance in the outward form and mental qualifications, is it abſurd to ſuppoſe that the ſame analogy may hold concerning the quality and diſpoſition of thoſe parts which are

* Page 20.

are not in our power to examine? What makes this analogy more probable, is, that the nerves are the common agent in both theſe caſes.--I do not mean to be underſtood to ſay that this reſemblance always takes place throughout, in the diſpoſition of the body to diſorders, any more than it does in reſemblance of perſon or mind: A man may inherit a feature of his face, diſpoſition of mind, or diſorder of the body, from his parents, and yet be very unlike in other reſpects; all I meant to ſay was, that it did not appear abſurd to ſuppoſe it poſſible.--But Dr. Cadogan objects "that there are whole nations of active people, knowing no luxury, who for ages have been free from it, but have it now ſince the Europeans have brought them wine and ſpirits."* This fact is, I fear, but too true; yet I ſtill think it will be found no objection to the argument, that the gout may be hereditary.--Intemperance in our diet, and particularly, as Doctor Cadogan obſerves, the inordinate uſe

* Page 20.

uſe of fermented liquors, will certainly produce the gout where it was not before, which may deſcend to their poſterity, yet may ſtill, in a courſe of generations, like other hereditary diſorders, by proper methods of life and avoiding the cauſes which firſt produced it, be worn out and eradicated. To ſay that a diſorder is hereditary, by no means implies that it is perpetual in the family, and never to be rooted out; this is not the caſe, as was before obſerved of the diſorders which the Doctor himſelf allows to be hereditary, ſince if it was ſo, all mankind muſt by this time have been ſcrophulous or inſane, and perhaps both, ſince, I fear, if any genealogy whatever ſhould be traced backwards, we ſhould find ſome of our anceſtors who have ſome time or other laboured under one or both of theſe complaints, which, by that way of reaſoning, muſt neceſſarily have infected all their poſterity. Diſeaſes appear, like other human things, to have their riſe, progreſs, and decay,

cay, or perhaps, more properly ſpeaking, change of nature; nor are we always able to trace ſatisfactorily the cauſe of theſe variations. A few centuries ago the leproſy was almoſt, if not entirely, as common in Europe as the venereal diſeaſe is at preſent, and at that time was eſteemed both hereditary and contagious; at preſent it is rarely ſeen, and when it is met with does not appear to be either.

As to the next argument mentioned by the Doctor in favour of the gout's being hereditary, viz. *becauſe it is incurable by medicine*, I can by no means admit of it. For even granting it to be incurable, I can ſee no neceſſary connection between that and its being hereditary. Were the Hiſtory of Phyſic examined, I am inclined to believe, that cancerous complaints would be found at leaſt equally incurable with the gout itſelf, yet they have never, as I know of, been eſteemed hereditary, and are frequently owing to an accidental cauſe. It is e-

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qually probable, that diſorders of our own acquiſition may be as incurable as thoſe we inherited from our forefathers, ſince no good reaſon can be given why their being hereditary ſhould add to their virulence. On the whole, then, though I cannot help thinking, that what has been ſaid pleads very ſtrongly in favour of the gout's being ſometimes hereditary, I would by no means be thought to inſinuate that it is always ſo, as I doubt not, that it is at leaſt as often brought upon ourſelves. Intemperance, indolence, and vexation, which the Doctor has very properly enumerated as its cauſes will, beyond a doubt, produce it, *ab origine*, and in this caſe, as he very properly ſays, "we cannot excuſe ourſelves by throwing the fault on our parents, that our complaints may be more juſtly founded."----Perhaps, the trueſt account of any may be that given by Aretæus, who ſays of it, "ex cujuſve naturâ ac victus ratione contrahitur."

THE next point which the Doctor endeavours to prove is, "that it is not periodical."---If it were of uſe to quote authorities, almoſt every medical writer, from the inſtitution of phyſic to the preſent time, has been of opinion, that the gout is periodical as well as hereditary, and I think great regard ought to be paid to them as to this point, ſince it muſt be determined principally, if not altogether by obſervation. "Podagricæ affectiones vere et autumno utplurimum moventur," are the words of Hippocrates, and nearly all ſucceeding writers have concurred in the ſame opinion. Sydenham, who deſervedly gained a great part of the eſteem in which he is held from his excellent account of this diſeaſe, expreſsly repreſents it as returning regularly in ſpring and autumn. He himſelf writes from thirty-four years experience, and I believe that thoſe who have been ſubject to this diſorder ſince his time, are but too well convinced, that he copied nature in his re-

preſentation of it.---But I ſhall lay no ſtreſs on this, but proceed to examine the reaſons that the Doctor gives for thus differing in opinion from ſo great authorities. He ſeems in the firſt place to think, that its being periodical is neceſſarily connected with the notion of its being hereditary. I own, I can ſee no neceſſary connection between theſe ideas, and, indeed, none of the other diſorders, which he himſelf acknowledges to be hereditary, are of this kind. Nor is it neceſſary that (although periodical) it ſhould be regularly ſo. The term, indeed, ſtrictly taken, implies an unvarying regularity, but if taken in the ſame acceptation as it generally is in medical books, means no more, than that it is the nature and diſpoſition of the diſorder to return at certain intervals or periods; nor does any accidental interruption or variation render the uſe of it improper. Our returns of ſleep and appetite may be properly termed periodical, yet theſe often vary without any diſorder or

apparent

apparent cauſe. 'Tis in this ſenſe that the term muſt be underſtood of the intermittent fever, which our Author quotes as a model of periodical diſorders. But, even this is not ſo invariable as he repreſents in the time of its return. Do not we often ſee a tertian depart of its own accord, or change into a quotidian or quartan, and this into a double or triple quartan, without any aſſignable reaſon? Cleghorn relates, that he often found the fit, as the patient's ſtrength decayed, conſiderably anticipate the time it uſed to return.---Nor are the returns of the gouty paroxyſms always owing to the cauſes which the Doctor aſſigns. An accidental circumſtance, ſuch as a blow on the limb which had been accuſtomed to be affected, ſudden expoſure to cold, and various other accidents, ſometimes will inſtantly bring on a fit of the gout, long before the time it would naturally return, and which could not be attributed to what the Doctor calls accumulated indigeſtion, by which I apprehend, he means indigeſted,

or

or at leaſt unaſſimilated matter, taken into the veſſels and habit of the body.

The laſt point that the Doctor contends for is, *that the Gout is not incurable*. This is a point which I ſhall not on many accounts diſpute. To determine *à priori* that a diſeaſe is incurable, ſhuts out all further attempts, and, at the ſame time, argues great preſumption. A late elegant writer of great medical knowledge has very properly recommended it to the profeſſion, to make uſe of the word incurable, as applied to diſorders, in no other ſenſe than as ſuch as they do not know how to cure; and I am apt to think that it ought to be underſtood in this ſenſe in Dr. Warner's Eſſay, as he has, I believe, very clearly convinced the world, that the cure of the Gout does not come within the circle of his abilities. I entirely agree, then, with Dr. Cadogan in this poſition in general, yet I ſhould be (as he is) very little diſpoſed to believe, that this could be

be effected by the ſudden operation of any remedy, or that any medicine in nature can enable a man to practiſe intemperance with impunity. This aſſertion the Doctor has very properly treated with contempt and indignation, as it is no more to be expected that any thing can enable a man always to exceed the bounds of temperance, than thoſe of juſtice or prudence, without ſometimes ſuffering for it.

He has, likewiſe, very properly obſerved, "that the utmoſt that could be reaſonably expected from medicine, would be to relieve and remove preſent diſorders, without pretending to inſure it from future injuries."--I cannot, nevertheleſs, agree with the Doctor in his ſubſequent opinion, that "after a fit of the Gout is well over, that the man has no more gout or ſeeds of gout in him than he who never had it, and that if he did not again breed it, it would never return."---Nor is it a proof of this that the gout has

been ſometimes cured by a milk diet, ſince that has ſcarce ever been found efficacious, unleſs entered upon early in life; and when begun in a more advanced period, rather tended to aggravate than relieve the ſymptoms. Sydenham has obſerved that the gout is often prematurely brought on thoſe who, after a continued habit of indulgence in the uſe of fermented liquors, afterwards changed them for thoſe of a thin and cooling kind.

Tho' I agree with Dr. Cadogan in not thinking the gout incurable, I cannot agree with him in opinion, that it may be more eaſily and perfectly cured than almoſt any other chronic diſeaſe. In proof of this he alledges, "that the gout is a diſeaſe of the beſt conſtitution, relieving itſelf by throwing off harſh and bad humours from the vitals and out of the blood upon the extremities, where they do leaſt harm to the powers and principles of life and health; and as theſe humours can be no more than the daily accumulations

mulations of indigeſtion, if a man can live without breeding conſtantly this undigeſted acrimony, he may moſt undoubtedly live free, not only from the gout, but every other chronic diſeaſe alſo."

To reaſon on the nature of the gout, would exceed greatly the limits of a pamphlet of this kind. I ſhall only then obſerve, that the cauſe of the gout being ſeated in the acrimony of the humours of the body, is by no means ſo inconteſtible as the doctor ſeems to think.

The opinions of phyſicians themſelves have varied exceedingly concerning this, ſome attributing it to a ſaline, or tartarous acrimony; others to a bilious, and ſome have added to theſe a pituitous tenacity. But in fact, experiment does not ſeem to warrant any of theſe ſuppoſitions. The fluids of gouty people, in the intervals of the fit, and even juſt before its appearance, do not appear to differ ſenſibly from thoſe in perfect

health ; and tho' ſome variation has been ſometimes perceived during the paroxyſm, it ſeems much more probably the conſequence than the cauſe of the fit. Moreover cauſes will bring on a fit of the gout ſuddenly, which we cannot ſuppoſe to act in the leaſt on our fluids, ſuch as agitation of mind, or a ſlight blow, or ſtrain of the part uſually affected. Moreover the ſudden tranſitions or metaſtaſes of the gout, from one part to another, are often much too quick to be imputed to a conveyance of the gouty matter, by means of the circulating fluids. Boerhaave ſeems aware of theſe objections, and has therefore referred the cauſe of the gout to the vitiated diſpoſition of the nervous veſſels, and the acrimony and tenacity of the nervous fluid itſelf. But this account by no means clears up the difficulty. For the very exiſtence of a nervous fluid, we have nothing but probability, and till this is aſcertained, we can ſcarce draw any ſatisfactory arguments from its quality or conſiſtence. The gout is moſt probably a diſ-

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eaſe of the ſolid parts, and of the nervous ſyſtem more peculiarly; but in what manner it is produced, or to what immediate cauſes it is owing, we are yet ignorant. But even granting it to be as Dr. Cadogan alledges, a diſorder of the fluids, I ſee no reaſon why this might not be inherited from our parents as well as any other complaint. In ſhort, it will be time enough to accuſe *acrimony* of any kind, as the cauſe of the gout, or other chronic diſorders, when it ſhall be proved to exiſt in ſuch caſes. No acrimony of our fluids has been yet diſcovered except that of the ſeptic or putrefactive kind, which undoubtedly does not exiſt in this caſe; and when it does, ſeems rather the conſequence than the cauſe of the diſeaſe, as it does not take place until that is far advanced.----Perhaps this word, when mentioned as the cauſe of diſorder, might in general be referred to the liſt of thoſe before mentioned by the doctor, which *ſatisfy, tho' they give no kind of idea.*

How far the doctor's promiſe in the ſubſequent paragraph, to point out a courſe of life which ſhall preſerve us from the gout and all other chronic diſeaſes, is likely to be depended on, I ſhall hereafter conſider, when I come to treat of his method of cure.

The next generally received opinion, which the doctor denies, is, "that any peculiar diſorders are incident to any conſtitution and time of life." Nay, he even goes ſo far as to ſay, that there is no eſſential difference of conſtitution but of "*ſtrong* and *weak*, and that this is produced more by art than nature." This opinion is ſo directly contradictory, not only to the received opinion of phyſicians, but to common ſenſe, that it is wonderful that the ingenious author could ſo peremptorily aſſert it. Daily experience ſhews that the conſtitution, or what the ancients called temperament, is varied in different ſubjects, as well as the diſpoſition of the mind. It ſeems now to be generally thought that the doctrine of

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four temperaments of the ancients, was founded more on obſervation than any reference to the four cardinal qualities, to which they have been ſometimes aſcribed. The number might certainly be much enlarged, yet thoſe diviſions that are ſet down have a real foundation in nature. Thus a habit of body, attended with light and ſoft hair, a large ſyſtem of arteries, marked out by a florid complexion, great ſenſibility, eſpecially to the pleaſurable paſſions, which the ancients denominated a ſanguineous habit, differs eſſentially from one in which the hair was hard and curled, the arteries ſmall in proportion to the veins, diſtinguiſhed by a lividity of the ſkin, and in which the ſenſibility was leſs in degree, but more accurate, which the ancients denominated a melancholic habit. They may be both equally ſtrong, yet differ greatly in the diſeaſes to which they are liable; in the one, all diſorders attendant on an increaſed ſenſibility, and large arterious ſyſtems: *e. g.* Thoſe of the inflammmatory kind, as fevers, con-

ſumptions,

ſumptions, and arterious hæmorrhage; in the other, diſorders ariſing from a contrary cauſe, as dropſy, liver complaints, obſtructions of the alimentary canal, apoplexy and palſy, and venous hæmorrhage.

Do not we likewiſe commonly obſerve the make of the body indicate a tendency to certain diſorcers? Does not a long neck, narrow cheſt, and lean habit, ſhew a diſpoſition to phthiſical diſorders? And does not a ſhort neck, and corpulent habit, threaten apoplexy and palſy.

Moreover, the conſtitution and habit are greatly varied according to the time of life. In infancy the ſanguineous habit prevails in its full force; in manhood the choleric, which ſeems to be an intermediate ſtate between the ſanguineous and melancholic, which laſt prevails in old age. This fact ſeems to argue ſtrongly againſt our author's ſubſequent aſſertion, viz. that there are no diſorders neceſſarily peculiar to any time

time of life. If the conſtitution varies, 'tis obvious that the diſorders incident to it muſt do ſo likewiſe. But our author has guarded his expreſſion by inſerting the word *neceſſarily*, as if to imply that they were owing to ourſelves. But I would alledge, that the inſtances on which this aſſertion is founded are too few to draw any general concluſion from them. The mode of life, likewiſe, with which longævity has been found compatible, has been ſo varied as to afford no certain indication. If longævity has been imputed in one inſtance to extraordinary abſtinence, in another it has been found compatible with a more free method of living. I have been well informed that a late perſon in high ſtation, after having made all poſſible enquiry concerning the methods by which life had been preſerv'd to a great length, could, on the ſtricteſt examination, find one general circumſtance only, which had been practiſed by all that had attained to a great age; which was that of *early riſing*. But if (as Dr. Cadogan does not ſeem to doubt) our

our diſſolution ſome time or other is inevitable, it need not ſeem wonderful, that the mortal fabrick ſhould give ſome ſigns of its decay, before it falls to the ground.

I ſhall now proceed to examine what the Doctor has ſaid concerning the cauſes which he has aſſigned for all chronic diſeaſes:

The firſt of theſe is INDOLENCE.

The firſt part of this chapter contains a very elegant and rational perſuaſive to the uſe of exerciſe, and ſuch as I doubt not every man's experience muſt bear teſtimony to the truth of. But I imagine that the modern phyſiologiſts will ſcarcely be diſpoſed to give him much credit for his account of the animal fluids. The doctrine of Boerhaave and Leuwenhoeck concerning the compoſition of the red globules is now entirely exploded, as is the notion that all the parts of the blood were convertable into one another. This has ſo little foundation, that the moſt

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common experiment proves that the three parts of the blood do not admit of any intimate union one with another. The ſeroſity ſpontaneouſly ſeparates, and, although the coagulable lymph and red globules ſeem to remain united, their combination is no more than a mere entanglement of the latter in the former. Nor do the beſt phyſiologiſts allow the fact of the red globules ever loſing their colour. That this is made deeper by the accumulation of the red globules, is certainly true, but it is no leſs ſo, that when ſeparate they have a red colour. This is plainly proved by the red tinge, which they in ſmall quantity impart* to a large one of water. Nor is the fact at all proved, that the ſeparate particles compoſing our fluids, are all of a globular form. The ſeparate particles compoſing the coagulable lymph and ſeroſity, cannot be at all diſtinguiſhed, notwithſtanding what Leuwenhoeck has aſ-

 ſerted ;

* Rubra pars per aquam diffuſa plure etiam aquâ in infinitum fere diluta, dilutius quidem rubet, nunquam tamen flaveſcit uti nec recentis ſanguinis guttula, millecuplo aquæ tepidæ permixtæ, in flavedinem deducitur, ſed rubella manet.—Gaubius Pathol, Sect. 341.

ſerted; and, though ſomething of this kind appears in the red part or cruor, it is probable, that they aſſume this form only when diffuſed in a fluid, with which they will not unite, as oil in water. But, even the form of theſe has been much diſputed, and, though Haller alledges them to be ſpherdical, Senac ſays, they are lenticular. In truth, there is nothing ſufficiently certain determined concerning them, from which we can draw any practical inferences.

Nor is the Doctor's Theory leſs liable to objection, which lays all nervous diſorders to the charge of obſtruction. He follows, in this reſpect, the Boerhaavian doctrine, which has been long given up, as contrary to experience. Van Swieten, the ſcholar and follower of Boerhaave, is obliged to give up his maſter's doctrine, concerning obſtruction, in a great degree, and later Pathologiſts have fully proved, that it takes place much leſs frequently than has been generally imagined, and that, when it does occur,

occur, it is not productive of the diſorders uſually attributed to it. As to rough angular particles in our fluids, which Dr. Cadogan ſpeaks of, we have not the leaſt authority to believe their exiſtence, as no experiment has ever rendered them viſible. Nor is the cloſing up of the ſmall veſſels of the body one of the bad conſequences that can be proved to reſult from an indolent habit of body. So far otherwiſe, that this circumſtance, which is found to take place univerſally in ſome degree towards the decline of life, (in the lymphatic ſyſtem particularly) has been moſt obſerved in thoſe who have in their youth been accuſtomed to hard labour. Yet, this has been often found to occur, without inducing any of the bad conſequences which our Author ſeems to apprehend from it. Nor is dyſpnæa, or ſhortneſs of breath, which we ſo commonly ſee in fat people, owing ſo much to this cauſe, as to the preſſure on the veins, occaſioned by the fat diſtending the cellular membrane, which obſtructs the return of

the blood to the heart, and of conſequence detains it in the lungs. 'Tis for the ſame reaſon that we generally ſee corpulent people inclining to dropſical diſorders, which are with great probability attributed to the ſame cauſe.

As to the remainder of this chapter, it is but juſt to acknowledge, that his reaſoning concerning the uſe of exerciſe, ſeems extremely well founded.

I NOW proceed to remark on what Dr. Cadogan has ſaid in his next chapter,

Concerning INTEMPERANCE.

WHAT the Doctor has ſaid in general concerning the bad effects of intemperance, is extremely proper, but I cannot ſo eaſily concur with him, when he comes to particulars. He ſays, very properly, in his deſcription of intemperance, that "it is a deviation from that rule which is pointed out by and moſt agreeable to nature." He

next obſerves, that " temperance is a thing of which no Engliſhman has, or can have the leaſt idea, if he judges from his own, or neighbour's habits. To form ſome notion of it, he muſt have ſeen other countries, particularly Spain, Portugal, and Italy, and obſerved how men live there." But in fact, no inference could be drawn relative to our climate, from any obſervations that could be deduced from thence; and I would deny, that any ſuch thing exiſts in nature, as what the Doctor calls natural temperance, not dependent on place or cuſtom, and which would of conſequence equally ſuit any or every ſituation, climate, or former manner of life. A manner of living that would be perfectly agreeable to nature in one climate, would be quite contrary in another. This is plainly pointed out by the different aliments ſupplied by nature in different climates, and from the different things that our appetites lead us to deſire, which are undoubtedly an impulſe of nature.

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I do not mean this as an objection to Dr. Cadogan's ſubſequent definition of TEMPERANCE, which every one will allow to be juſt, but to his application of it to particulars. I am inclined to think, when he ſpeaks of theſe, that he has been far from making ſufficient allowance for difference of climate; and, on this account, I cannot by any means agree with him in his general prohibition of the common uſe of wine or fermented liquors. The admirable author of the ſpirit of laws has been aware of this, and has therefore with great propriety obſerved, that the laws of the Carthaginians and of Mahomet, to prohibit the drinking of wine, were laws ſuited to the climate of Arabia and Lybia, but remarks very juſtly, that ſuch a law would be improper for cold countries, where the climate ſeems to force them as it were to a national ebriety very different from perſonal intemperance. "A German, ſays he, drinks by cuſtom; a Spaniard, by choice."

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The general cuſtoms and manners of a nation ought to be conſidered as no inconſiderable guides to determine our judgment in this reſpect; and when univerſally prevalent, muſt be conſidered in a great meaſure to proceed from indications of nature. But the opinion of writers, the hiſtory of mankind, and daily experience, confirm, that fermented liquors taken moderately are not only ſafe, but even neceſſary, in theſe climates. In hot countries, where the conſtitution is endued with a great degree of ſenſibility, which renders it obvious to every ſtimulus that naturally produces inflammatory complaints, where the humours are tending to putrefaction from the heat, and of conſequence require to be frequently renewed, *wine* would be highly improper on many accounts. The perſpiration is ſo exceſſive, that the blood ſtands in conſtant need of a ſupply of its aqueous part. This can be only done by watery liquors, as fermented ones could not be taken in ſufficient quantity without increaſing the inflamma-

tory diatheſis by their ſtimulus, which it ſeems the intent of nature to counteract. This would ſoon cauſe the humours of the body to run into putrefaction, on account of the increaſed heat and the humours not being paſſed off by perſpiration, which is always obſtructed when the heat is above a certain pitch. But in cold climates, the conſtitution and diſpoſition of the people vary greatly. Monteſquieu has very properly obſerved its influence on the human body in a political light; and the ſame cauſes produce conſiderable effects in a medical one likewiſe. The body has little ſpontaneous tendency either to inflammation or putrefaction, and the nervous ſyſtem ſeems rather to labour under a defect than an increaſed degree of ſenſibility. On this account nature requires that the food ſhould be of a kind to counteract in ſome degree the effects of the climate. Accordingly, fermented liquors and animal food, as being more ſtimulant to the ſyſtem, are proper to be uſed; and indeed, where animal food is uſed in large

large proportion, fermented liquors become in a great meaſure neceſſary to obviate in ſome degree the ſeptic tendency of ſuch a way of living. But I would truſt moſt to the general practice of mankind; and if this be examined, we ſhall find no nation, or ſet of people whatever, that do not make uſe of fermented liquors, of ſome kind or other, in their diet :* Even in the moſt northern parts, as Lapland and Greenland, a fermented liquor is prepared from milk, which they uſe daily with their food.

I cannot help thinking that this circumſtance is a ſtronger argument in favour of the general uſe of fermented liquors, than any that are drawn from any abſtract reaſoning whatſoever.

The next circumſtance in our diet which the doctor finds fault with, is, the uſe of

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* Perantiqua eſt, et univerſo orbi communis cupido. Nam etiam in ultimo orbis angulo Kamtſchatka Ruſſi in farina membranuliſque caulis ſphondylii maximi materiem detexerunt qua exoptatum delirium ſibi conciliarent. *Halleri Elem. Phyſ.* vol. vi. p. 244.

the common condiments to our food, viz. ſalt, pepper, muſtard, and vinegar. That exceſs in all or any of theſe, or their improper uſe, may have bad conſequences on our health, is undoubtedly true; but I much doubt if their being liable to abuſe ought to make us baniſh them from our tables altogether, as there is great reaſon to think that, when united with our food in a proper manner, they ſerve ſeveral important purpoſes in the animal œconomy. The practice of all nations almoſt univerſally agrees in the uſe of ſome condiment or other with their food, and that being the caſe with people who had not copied from one another, as having never had any intercourſe, argues ſtrongly their uſe to be founded on an inſtinct of nature, and not on mere cuſtom only. In hot countries, where (from the great propenſity of the humours of the body to putrefaction) the inhabitants live almoſt entirely on vegetable diet, ſome condiment of the acrid or aromatic kind is eſpecially neceſſary to obviate the flatulence which vegetable

table food only is ſo apt to generate. According nature has furniſhed them with aromatic plants, which ſerve this purpoſe perfectly well, and which in all probability were placed there with that intention. 'Tis probably, indeed, a miſtaken taſte or luxury in us to uſe thoſe of the hot pungent aromatic kind, in theſe northern countries, with animal food, where the uſe of a large proportion of fleſh meat is allowable, and even neceſſary. Inſtead of them, Nature has given us certain acrid plants, which being leſs ſtimulant, may be uſed in greater proportion in our diet; ſuch as all of the ſiliquoſe tribe; and 'tis found by experience that theſe kind of plants are the beſt correctors of the putreſcency of animal food, as they cure the ſea ſcurvy much ſooner and more effectual than thoſe of the inſipid kind. Moreover, in order to the proper digeſtion of our food, it is neceſſary that in its paſſage through the body it be mixed with ſeveral of the humours of the body; firſt the ſaliva, afterwards the gaſtric liquor, pancreatic juice, bile, and

lymph refluent from every part of the ſyſtem. In order to emulge theſe liquors properly, ſome degree of ſtimulus on the ſecreting gland is required. But vegetables of the nutritious kind are almoſt all of them nearly inſipid, and of conſequence would do this very imperfectly, without ſome addition; and fleſh meats, though they have more ſapidity, when mixed with vegetables as they ought to be, have ſcarce ſufficient ſtimulus without ſome poignant addition.

I imagine that they ſerve another purpoſe likewiſe. The periſtaltic motion of the inteſtines, ſo neceſſary to the excretion of our food, is in all probability owing to the ſtimulus of the aliment paſſing through them. Some kinds of vegetable food, as being nearly inſipid, have but little power in this way, except by their bulk; on which account thoſe who eat a large proportion of the farinaceous ſeeds, as rice, barley, or wheat, are of a coſtive habit. In relieving this ſymptom, condi-

condiments are found of eſpecial ſervice.* Animal food, likewiſe, though its paſſage through the inteſtines be quicker, (probably on account of its being more ſapid,) ſtands in need of condiment as well as vegetable food; ſince its progreſs to putefraction is proportionably more rapid. In order to check this and promote its paſſage through the inteſtines, ſome additions of this kind are eſpecially proper; and we find by experience that ſome plants of the acrid kind, which contain very little nouriſhment in themſelves, are the beſt correctors of animal food. They likewiſe enable the ſtomach to take in and retain a ſufficient quantity of food to nouriſh the body, as a fleſh diet is found by experience to be apt to pall very quickly without ſome ſuch addition. The general diſlike of mankind to food that is inſipid or nearly ſo, and the deſire they expreſs for ſome addition of this ſort, argue very ſtrongly that

* Freſh fruit is generally laxative, but this is generally owing to its fermenting in the ſtomach. Condiments, as being antizeümic, take off this quality.

that it is founded in nature, and not owing to a depraved appetite.

So much for the uſe of condiments in general. Much more might be ſaid, but the bulk of a book of this kind does not allow of much phyſiological reaſoning. I ſhall now ſay a few words concerning the particular condiments which the Doctor mentions and objects to: The firſt of theſe is

SALT. This ſeems leaſt liable to objection of any of the four mentioned, as when eat with freſh food it is not liable to be taken in quantity prejudicial to health, and is leaſt liable to diſguſt or pall the ſtomach on repetition.* It is not ſubject to be decompoſed in the human body, and on that account is ſerviceable in ſtimulating the inteſtinal ſecretions as well as thoſe of the mouth and ſtomach. Probably for this reaſon it is ſo much

* Videtur omnino aliquid in Sale eſſe, quod naturæ animali conveniat. Nam pene omnes gentes ſale utuntur, & etiam bruta animalia pleraque, certe quæ ruminant, ſale delectantur, et ab ejus non bene ſe habent. *Halleri Elem. Phyſ. vol. 6.*

much deſired by ruminant animals, whoſe food ſeems to require a large afflux of liquor from the glandular ſecretions of their organs of digeſtion, in order to be properly aſſimilated, ſo that their fondneſs for it may be owing to a natural inſtinct; and 'tis not improbable that our liking for it may be founded on a like cauſe.

PEPPER. This I fear, as we uſe it, is the moſt exceptionable of all thoſe mentioned. It is the produce of a hot climate, and might there be very properly taken with vegetable food; but here, as we make uſe of it with animal diet, 'tis undoubtedly ſuperfluous, and probably prejudicial. Its proper uſe ſeems to be with vegetables only, as it is a ſubſtance of a ſtimulant inflammatory nature.

MUSTARD. This is a vegetable of our own growth, and moſt probably well ſuited to our uſe in theſe northern climates, where a large proportion of fleſh meat is neceſſary.

It

It is poſſeſſed of a conſiderably acrid ſtimulus without the heating and inflammatory properties of the ſouthern ſpices, on which account it is found a powerful antiſcorbutic. I am inclined to think that our uſe of it with ſome meats which are of a ſtrong taſte, little perſpirability, and which run quickly into putrefaction, as pork, gooſe, &c. is not merely the effect of cuſtom, but in a great degree dictated by nature. Its uſe in food is extremely ancient; Hippocrates mentions it in his treatiſe of diet, and Aretæus recommends it to be taken liberally in that way, in caſes where other ſtimulants were forbidden; and is very laviſh in his praiſes of it, for its good effects in expelling flatulence, and promoting digeſtion, qualities which are ſeldom found in vegetables, except combined with ſuch a degree of ſtimulant quality as renders their frequent uſe improper. But our experience proves its innocence, when taken (as we do) with our food; and this is confirmed by numberleſs inſtances of perſons who have taken medi-

cinally

dicinally for a long time together, every day, ten times the quantity that is ever uſed with food, even by thoſe who exceed moſt in it, and that with great advantage in ſome of the complaints which, from the Doctor's way of reaſoning, we ſhould imagine it moſt inclined to aggravate. I cannot, therefore, agree with the Doctor, in his baniſhment of this ſubſtance from our diet.

THE laſt of the ſubſtances commonly uſed in this way is

VINEGAR. The uſe of this in diet is of very early date, as well as the foregoing: Hippocrates mentions it as ſuch, and it ſeems to have been more general in ſucceeding times, as it is ſaid to have made a part of the allowance of the ſtate to the Roman ſoldiers, as an article of diet, whoſe common drink on their military expeditions was this ſubſtance mixed with water. I allow that its uſe in this way was in a great degree medicinal, and that in large quantities

it is better ſuited to a hotter climate than our own. But when taken moderately, I cannot think its uſe in food, even here, improper* or inſalutary. It gives a grateful taſte to ſeveral kinds of aliment that would otherwiſe be apt to pall, and gently ſtimulates the ſtomach, ſo as to excite appetite. It is moderately antiſeptic, and probably by that quality obviates the putrefactive tendency of a fleſh diet, and is in that way antiſcorbutic. When in a perfect ſtate, or nearly ſo, it is ſafer to uſe as an acid condiment, than any of the recent juices, as having already gone thro' the vinous fermentation. It can have no bad conſequences in the blood veſſels, as it is eaſily ſubdued by the aſſimilatory organs.

I HOPE that what is here ſaid concerning condiments, as well as what was before ſaid concerning ſpirituous liquors, will be underſtood only of their moderate uſe. I have no more

* Salubre omnino & condimenti genus eſt, & denique potus. *Halleri Elem. Phyſ. vol. 6. page 220.*

more intention than Dr. Cadogan to vindicate the abſurd and intemperate uſe that is daily made of them in our food, where they are often prepoſterouſly joined together, and mixed with ſubſtances which were before only too ſtimulant. But I hope that there will be underſtood to be a wide difference between condemning (as I heartily do with Dr. Cadogan) their immoderate uſe and abuſe, and allowing them in the proper proportion that condiments ought to be taken. But our late improvements in luxury ſeem to have made us forget this diſtinction, as the ſubſtances which ought to be uſed in quantity ſufficient only to give a reliſh to our food, ſometimes almoſt equal the bulk of the remainder of the diſh.

Perhaps the beſt manner of avoiding ſuch exceſs, is to allow the moderate uſe of them in a proper manner; and there is no doubt that ſuch a regulation would be much more likely to be complied with than a ſevere prohibition.

On this account I cannot agree with the Doctor in his tremendous repreſentation of the bad effects of a little ſage and onion, with the addition of a few grains of ſalt, or even (tho' that is more exceptionable) of pepper, eat with a gooſe, a duck, or pig. Nor can I believe that the ſtill milder ſubſtances uſed in the ſtuffing of veal, or the trifling quantity of vinegar taken in, when we eat caper ſauce, or other pickles, to mutton or other fleſh meats, can lay the foundation of the dreadful train of evils which the Doctor aſcribes to them. Undoubtedly they may eaſily be exceeded in, and exceſs in them is prejudicial; but I ſpeak here (as the Doctor means) of their uſe, by thoſe whom he ſuppoſes to take them moderately.

I have before declared my opinion concerning the uſe of the aromatic or ſtimulant ſpices, ſuch as pepper, (the Cayan in particular as moſt ſtimulant) with fleſh meats; but in this caſe the Doctor ſuppoſes luxury

luxury to have made but little advance; and here I believe the quantity of pepper generally uſed is very ſmall, and in one inſtance, (ſtuffing of meat) for the moſt part mixed with a large proportion of the ſafeſt of all vegetable food, viz. *bread,* which in ſome degree qualifies its ſtimulant quality. Nor can I agree with the Doctor, in thinking ſo harſhly of pickles as he ſeems to do: They may, undoubtedly, like other things, be indulged in to exceſs, and thereby do harm; but in the manner they are here ſuppoſed to be taken, I cannot apprehend ſuch dreadful conſequences.

Most of the vegetables commonly uſed in pickles, are of the eſculent kind, and generally (I mean thoſe made at home, which are moſt uſed) nearly inſipid; but whether this be the caſe with the vegetable in its natural ſtate or no, the vinegar quickly deſtroys the peculiar flavour, and I believe qualities; ſo that, in ſhort, the generality of pickles can be conſidered only as ſo many

porous

porous ſpongy vegetable ſubſtances, containing vinegar. The vegetable part is not, indeed, ſo eaſy of ſolution as in its recent ſtate; but as they are always eaten with animal food, and but in ſmall quantity in proportion, little harm is to be feared on that account, as animal food promotes ſo much the ſolubility of all the vegetable food mixed with it.

The Doctor's next obſervation, concerning the impropriety of the uſe of ſeveral kinds of food by ſedentary people, is undoubtedly in general well founded; yet I am in doubt whether he has not extended his argument too far. Meat, preſerved with ſalt, tho' in ſome reſpects exceptionable, is not ſo difficult of digeſtion as our author ſeems to imagine: Tho' of ſeemingly firm texture when compact, it is, when divided, eaſily ſoluble in the ſtomach, which is probably owing to its being free of that glutinous viſcidity attendant on the fleſh of young animals, which renders them ſo difficult of digeſtion.

digeſtion. I have heard from an eminent phyſician, that he had obſerved many valetudinarians, whoſe ſtomachs could not bear a piece of veal, lamb, or chicken, but which eaſily digeſted a ſlice of ham or dried beef.

THE next remark of the Doctor's is relative to the management or dreſſing of our food. He is of opinion, " that our meat is in general over-done; if by boiling, he alledges that the juices are loſt; if over-roaſted, fryed, or broiled, it becomes rancid and acrimonious." This to be ſure is ſometimes the caſe; and yet I cannot agree with Dr. Cadogan, in adviſing to eat fleſh meat while its red juices are unchanged, except in ſome very peculiar circumſtances. Meats little done are certainly eaſieſt ſoluble, (which the Doctor lays great ſtreſs on, and is undoubtedly a circumſtance of great importance) but they are, at the ſame time, exceedingly alkaleſcent, and run * quickly into

* Sir John Pringle has obſerved that raw meat ferments more violently than when roaſted, and generates more air.

into putrefaction; ſo that I much doubt whether they are to be choſen for thoſe who eat a large proportion of animal food, as ſuch diet would be apt to induce a habit of body highly ſcorbutic, or tending to putrefaction, except taken with a large proportion of vegetables. On this account I am apt to ſuſpect that the French (who for a warm climate eat a large quantity of animal food) eat their meat ſo much roaſted or boiled, from a kind of natural inſtinct, in order to obviate its ſeptic tendency, which is much augmented by the greater heat of the climate. Nor are the inſtances, by which the Doctor would recommend this method of life, well choſen. As to cannibals, I believe their exiſtence is very doubtful; and though ſome nations are acknowledged to eat their food without any dreſſing by fire, it is for the moſt part previouſly dried, and deprived of the greateſt part of its juices which ſooneſt corrupt. As to beaſts of prey, no analogy can be drawn from them to us in the leaſt; they are furniſhed with

ſhort

ſhort inteſtines, by which means their excretions are quick, and the food does not remain a ſufficient time to acquire a great degree of putrefactive tendency. But this is not the caſe with man, whoſe inteſtines are of a middle length between the herbivorous and carnivorous animals, and conſequently the food muſt make a longer ſtay, which points out the reaſon why its tendency to putrefaction ſhould be moderated. Moreover the ſtomachs of all carnivorous animals are found to contain a ſtrong acid, which probably ſerves as an antiſeptic. Something of this kind is found in the ſtomachs of many animals, but in the carnivorous ones it is by much the moſt remarkable. Whether this is ſecreted from the glands, as a proviſion of nature to obviate the bad effects of the food's putrefaction, or produced by the meat's undergoing an acid fermentation, is not clear. Dr. Pringle has proved that animal ſubſtances, contrary to what has been imagined, promote, rather than prevent the acetous fermentation, and

'tis likely that in this it does not go on ſo rapidly to the poutrefactive fermentation, as it would do otherwiſe, on account of the air being excluded in a great meaſure. 'Tis obſervable that much leſs communication with the air is neceſſary to the acetous fermentation, than to either the vinous or putrefactive. Nor can I ſee any good reaſon for recommending meat broiled, as preferable to any other way of dreſſing, ſince the lean part is more ſcorched and dry on the outſide than by any other of the common methods, and the fat rendered more empyreumatic, as being in immediate contact with the fire; not to mention the additional ſtrong taſte imparted to the whole by the ſteam of the oily parts which are burnt during the operation.

Our Author then goes on to make ſome very pertinent remarks concerning the nature of our food in general, which he rightly obſerves ought to be of the mixed kind, viz. vegetable and animal, and has very properly drawn

drawn his arguments in favour of this opinion in a great meaſure from the "deſire and longing which thoſe who have been confined to either of theſe kinds of food have for things of the other ſort, as well as pleaſing ſenſation when they are taken, which, as he ſays very juſtly, plainly indicate a natural want." It were to be wiſhed that our Author had duly conſidered this circumſtance in ſome other parts of his work, as he would then have been more cautious in referring the general manner of life of whole nations to a depraved appetite which was more probably an inſtinct of nature.

He next proceeds to declare his opinion concerning the cauſe of chronic diſeaſes, which he lays to the charge of acid crudity in our fluids, producing coagulations, concretions, and obſtructions of various kinds, which, he ſays, are very manifeſt in the gout, rheumatiſm, ſtone, and moſt nervous caſes.

I BELIEVE that it would be very difficult to prove that the above-mentioned diſorders owe their origin to acidity in the juices, which the Doctor ſo confidently aſſigns as their cauſe, or indeed to prove that ſuch a cauſe ever exiſted at all. Experiment rather ſhews the contrary, ſince neither the blood or any of the ſecreted juices ſhew ſigns of any ſuch quality on the ſtricteſt examination. All reaſoning then of this kind muſt be frivolous until the exiſtence of this be aſcertained.

IT muſt, indeed, be owned, that an acid, as was before obſerved, is found in the ſtomachs of many animals, and, among the reſt, of men. But this, except carried to an exceſs in quantity or quality, is not a diſorder, but a neceſſary ſtep towards the aſſimilation of our food. It was formerly thought that only vegetable ſubſtances were capable of the vinous and acetous fermentation, and that animal ſubſtances went directly into the putrefactive, without going through the two foregoing; but Sir John Pringle

Pringle has very plainly proved that animal food, as well as vegetable, is capable of the vinous * and acetous fermentation, and has brought many ſatisfactory argumenas to make us think that both of theſe always take place in the human body, previous to the digeſtion of our aliment. In an healthy ſubject, the ſtay it makes in the ſtomach is too ſhort to admit of the acetous fermentation going to any great length, and moreover the ſaliva, * as appears by experiment, and probably ſome of the other † inquiline juices likewiſe, have a power of moderating both this and the vinous fermentation, preventing in the firſt the tumultuous generation of air, and in the ſecond, the high degree of acid to which it would otherwiſe be carried.

But

* Sir John Pringle's Exp. Pap. IV. Exp. XXX.

† Ne vero in plenum acorem cibi degenerent, impedit calor ipſe putreſcibilis, vis adfuſi liquidi gaſtrici, deglutitæ ad ſemunciem in horâ ſalivæ, potus alcaleſcentium, bilis certe frequentiſſime in ventriculum redeuntis.

Haller Primæ Lineæ Phyſiologiæ § DCXLIX.

But when from a weakneſs of the fibres of the ſtomach its periſtaltic motion is ſlow and weak, and of conſequence the food makes too long a ſtay there, or from want of mandication, or defect in the ſecretory organs theſe juices are not poured forth in ſufficient quantity, or have their quality impaired, the fermentation is increaſed to a noxious degree. But though acidity is often productive of troubleſome effects in itſelf, it is rather to be conſidered as the conſequence, than the cauſe of the diſorder. Undoubtedly in perſons ſubject to acidity at the ſtomach, ſubſtances in themſelves aceſcent, or likely to become ſo from their quality or viſcid conſiſtence rendering them difficult and ſlow of digeſtion, are not proper; but in many caſes ſimple aceſcent ſubſtances are very wholeſome and even neceſſary. In warm climates or ſeaſons, aceſcent ſubſtances are highly calculated, by their cooling and antiſeptic qualities, to prevent inflammation and moderate the tendency of the humours to putrefaction. In chronical diſeaſes likewiſe of the putrefactive

kind,

kind, theſe ſubſtances are found of great ſervice by their antiſeptic property, on which account ſugar and infuſion of malt were recommended in the ſea ſcurvy by Dr. Cullen, of Edinburgh, and Mr. M'Bride *. The former of theſe ſubſtances has been found to furniſh a remarkably wholeſome and nutritive aliment in our Weſt-India iſlands; and Mr. Cleghorn has remarked, that in Minorca the obſervation of Galen is confirmed concerning the healthineſs of thoſe who are ſet to watch the vineyards, and feed on grapes, figs, and bread, (all aceſcent ſubſtances) although at that time of the year epidemic complaints are moſt frequent and dangerous. Experience likewiſe tells us, that all fruit may be more ſafely eaten, as it contains more ſugar. Moreover the boiling, to which moſt of the preſerved ſweets (to which the Doctor ſeems to allude) have been ſubjected, previous to our uſe of them, takes off in a great degree their fermentative quality. 'Tis the opinion of many great phyſicians of the preſent age, that the common

uſe

* Vide M'Bride's Eſſays.

uſe of ſugar has been one of the great cauſes why putrid and epidemic diſorders are leſs frequent than they were formerly. It may then, I think, be fairly laid down, that aceſcent ſubſtances, moderately taken, are ſo far from being in themſelves noxious, that they are probably abſolutely neceſſary to correct the putrid diſpoſition of the fluids. Nay even Dr. Cadogan, a little before, allows of their uſe, when he recommends vegetable food to be taken with animal, and afterwards where he adviſes freſh fruits, both of which are much more aceſcent than the ſubſtances which he here finds fault with for that quality.

But, in my opinion, the moſt dangerous error, into which he has fallen, is in what he has ſaid concerning the unwholeſomeneſs of bread.

The uſe of bread, of ſome kind or other, is as ancient as the hiſtory of mankind. It is likewiſe ſo univerſal, that without ſome form

form of this kind no nations ſeem to live. Even in Lapland, where no corn grows, they make a kind of bread of their dried fiſhes, and of the inner bark of the pine, which ſeems to be made uſe of, not ſo much for the ſake of the nouriſhment it affords, as the ſupplying a dry food. This univerſal deſire of mankind is undoubtedly owing to a natural inſtinct. The preparation of our food depends on the accurate mixture of the animal fluids in every ſtage. Among others the ſaliva is neceſſary, which requires dry food as a neceſſary ſtimulus to draw it forth, as fluid aliments make too ſhort a ſtay in the mouth to cauſe a ſufficient degree of manducation to emulge that liquor, and mix it intimately with our aliment. On this account we uſe bread with our animal food, which would otherwiſe be too quickly ſwallowed. For blending the oil and water of our food, nothing is ſo fit as bread, aſſiſted by previous manducation. For this purpoſe bread is neceſſary in the ſtomach, as 'tis proper that a ſubſtance of ſolid conſiſtence

ſhould be long retained there. Moreover 'tis neceſſary that the other animal fluids be mixed with our aliments in order to correct their aceſcency and haſten their aſſimilation. But liquid ſubſtances would not anſwer this end, whereas the ſolid ſtimulates and emulges the glands of the ſtomach.

For this purpoſe then bread is admirably adapted, being bulky without too much ſolidity, and firm without difficulty of ſolution. So much for the form of bread. But the Doctor objects to its aceſcency, which it muſt be owned it in ſome degree poſſeſſes. But this quality of it is neither ſo potent or ſo likely to become noxious as in other vegetable ſubſtances, ſince it has already paſſed in a great meaſure through the vinous fermentation in which the generation of air, the common cauſe of flatulence, takes place. By its acetous tendency it likewiſe moderates the vinous fermentation of other ſubſtances, and is in that reſpect an antizeumic. When it has been over-

tive, and this and the foregoing circumſtance determine the proper degree of fermentation, viz. that it ſhould not be ſo much as to have this effect, but ſufficient to check the * noxious vinous fermentation. As to the experiment which the Doctor adduces, concerning the aceſcent diſpoſition of bread, I cannot think it in the leaſt applicable to prove its unwholeſomeneſs. Undoubtedly when the acetous fermentation is carried to too great a length it becomes noxious as well as the vinous. But nature has provided againſt this by ſeveral methods.

The juices of the ſtomach, before-mentioned, moderate this tendency; and moreover we find by experience, that as our food acquires this quality, it becomes in a degree purgative, and is paſſed into the inteſtines,

* Sir John Pringle has mentioned in his Experiments, that bread and water only were found not to be capable of the vinous fermentation, as they generated no air; and when mixed with animal ſubſtances determined powerfully to the acetous.

where it meets with the bile which corrects its acid diſpoſition: nor is the ſtay of the food in a healthy ſtomach ſufficiently long for it to acquire that quality in the degree he mentions. Moreover a communication with the air is neceſſary, which is not the caſe in the human body, as it appears to be in the experiment he relates; and as the circumſtances are by no means parallel, no inference can be deduced from it. If the opinion of phyſicians in general is of any weight, it is the ſafeſt of all vegetable aliment, and the beſt corrector of animal food. Many weak ſtomachs, that can bear no other vegetable ſubſtance, find no inconvenience from this, and it is in all probability owing to their large uſe of bread that the French, who live in a warm climate, are enabled to take ſo large a proportion of animal food without inducing putrid diſorders. Galen mentions bread, moderately baked and well fermented, as the moſt eaſy ſubſtance of digeſtion; and moreover adds, that without the latter of theſe, which the Doctor ſeems to think a

pernicious

pernicious quality, it is not proper to be uſed by any one *.

I SHALL conclude what I have to ſay on the wholeſomeneſs of bread in general, with the words of Hoffman:

" Panis inter reliqua alimenta principem " locum tenet, nec facilé eo ſine ſanitatis " detrimento carere poſſumus. Ejus uſus " omni tempore, ætati omni ac tempera- " mento accommodatus eſt, ideoque recté " univerſale alimentum vocari poteſt, neque " carnes et alia, ſine pane, facile aſſumi poſ- " ſunt, quippé quæ ſibi relicta nauſeam " creant †."

NOR is wine ſo general a cauſe of aceſcency as the Doctor repreſents: on the contrary it is found, when moderately taken, to correct this quality of vegetable as well as the

* De Alimentis, Lib. I.

† Hoffman, Tom. I. De ſalubritate et inſalubritate eſculentorum.

the putrefcency of animal food, and this property is obferved of the thin light wines, which being weakeft are moft fubject to the acetous fermentation as well as of thofe which contain more alcohol, and are conſequently ſtronger.

When taken improperly, or in too large quantity, they weaken the ſtomach and organs of digeſtion, and by that means may be detained ſo long as to run into the acetous fermentation. But even here their effects in general as aceſcents are ſeldom very hurtful; ſince having already gone through the vinous fermentation, they generate no air. This obſervation is not applicable to ſome wines (the ſweet ones in particular) which have their fermentation interrupted, and of conſequence contain a quantity of freſh muſt, which has that fermentation to undergo, and which may produce all the bad effects in the ſtomach of the vinous fermentation. On this account the French wines are preferred to the Spaniſh, as being more

more perfect and uniform though they contain leſs alcohol.

I CANNOT alſo agree with Dr. Cadogan in the next maxim he lays down, viz. "that it is ſafer to drink a bottle of wine at a time, once a week, than a little every day." Nor do I think the publication of ſuch an opinion is likely to be of ſervice to the cauſe of temperance. What the Doctor ſays concerning the impropriety of the habitual uſe of ſtimulants, and of their effects wearing out by cuſtom, is extremely true; yet, in my opinion, not applicable to the preſent caſe, ſince I look upon wine, taken moderately, to be moſt neceſſary as an antiſceptic, to qualify the putrefactive tendency, which the large quantity of animal food that we take in, would be apt to induce. So far I will nevertheleſs agree whith the Doctor, that it would be ſafer and more eligible for a man to exceed now and then in this reſpect living moderately in the intervals, than to get into a daily

cuſtom

cuſtom of any exceſs, however ſlight in appearance. But I look upon this to be very different from a prohibition of wine, or ſpirituous liquors, altogether. In ſhort, the direction of Celſus, in this reſpect, is probably the beſt, who ſays: "Sanus homo nullis obligare ſe legibus debet---nullum cibi genus fugere quo populus utatur interdum in convictu eſſe, interdum ab eo ſe retrahere---modo *plus* juſto interdum non *amplius* aſſumere."

I HAVE nothing further to obſerve on the remaining part of this chapter, as it contains nothing immediately applicable to practice, except ſome directions concerning the choice of our wines, in which I entirely agree with him, that the weaker and lighter wines are much preferable, on many accounts, for us, who, being in a cold climate, are likely to uſe them more freely, to the ſtronger and more heady kinds.

In the former part of the ſubſequent chapter, our Author has given a very pathetic and juſt deſcription of the bad conſequences which grief and vexation bring on our health, to the truth of moſt of which every one who has been ſo unfortunate as to have had any experience of this kind, will readily teſtify. He concludes it with a kind of recapitulation of what he has before ſaid in the former part of his work, and ſo far I am ready to acknowledge, that although I cannot agree with him in every particular point, I heartily concur with him in his general poſition, that no artificial medicines, or applications whatſoever, can be, in any degree, ſo efficacious to preſerve our health, as activity, temperance, and peace of mind.

The Doctor having finiſhed what he had to ſay concerning the preliminary points, comes at length to the moſt eſſential part, viz. "his method of cure of the gout, and all

" other chronic diſeaſes, and the repair of " a broken conſtitution *."

But as his arguments are adapted almoſt entirely to the gout, which he before had ſaid he propoſed to take as a general inſtance, I ſhall leave the conſideration of the reſt until the Doctor ſhall think fit to treat more particularly concerning them.

The firſt practical obſervation which the Doctor makes, is concerning the abſurdity of the attempt to cure the gout by medicine; it being, as he alledges, " at the time when ſuch trial muſt be made, a diſeaſe that has no exiſtence." This is deduced from his former poſition, that the gout is no inherent diſorder, but produced, from time to time, by our own miſmanagement. But I am much inclined to think, that the Doctor's arguments are not ſufficiently numerous, or convincing, to render all attempts to cure the gout, in themſelves, ridiculous.

* Page 77.

If it be a diſorder depending on a fault in the digeſtive organs; or owing to any irritating ſubſtances, accumulated or ſecreted, and thrown upon the parts, commonly called *gouty matter*; or if (what ſeems more probable) that it be a diſorder of the nerves, and that its returns are owing, in a great meaſure, if not altogether, to cuſtom and habit, it will not ſurely be thought abſurd to give medicines with an intent to ſtrengthen the firſt of theſe, to evacuate or correct the offending matter in the ſecond caſe, or, in the laſt inſtance, to interrupt or break into the courſe of the paroxyſms; and all this, at a time when the diſorder itſelf was not preſent. Is not the bark, and other medicines, properly given, to cure, or, which is the ſame thing, prevent the return of an intermittent fever, at a time when we could only from experience, and not from any deduction of reaſon, know that it would return at all, any more than we can a fit of the gout. In theſe intervals there is often no more ſigns of any diſorder being formed, than

in a gouty complaint. Since the late diſcoveries in inoculation, it has been undoubtedly proved, that mercurial medicines, taken previous to the infection, will abate the virulence of the ſmall pox; which the Doctor will ſcarce alledge to have had any exiſtence prior to the taking the medicine: But in reality the abſurdity lies in the terms only; and if the words *prevent*, or *mitigate the effects of*, had been ſubſtituted for *cure*, a future diſeaſe, no abſurd interpretation would probably have been affixed by any one. I am nevertheleſs not much more inclined, than Dr. Cadogan, to pay much credit to the promiſes of any one who ſhould engage to cure the gout by the operation of any medicine. The diſorder, in general, ſeems to be too deeply interwoven into the conſtitution, to be thus ſuddenly eradicated; and all the attempts, hitherto made, having proved rather detrimental than ſerviceable, ought to put us on our guard very much, and teach us to ſuſpect all who come with ſuch profeſſions.

An entire milk diet is the only thing that has been found efficacious in preventing the fits of the gout, without inducing a worſe complaint; and even this has done more miſchief than ſervice, except begun on early in life, and rigorouſly adhered to through the courſe of it. The Portland powder, as Dr. Cadogan obſerves, certainly prevented the return of the paroxyſms, but never failed, at the ſame time, of putting an end, in a few years, to the life of all thoſe who made a trial of it.

Nevertheless, though its bad effects are unqueſtionable, I much doubt if they are explicable on the foundation which the Doctor aſſigns for them. He alledges, "that its effect was to keep up a conſtant fever, which, by its own bad conſequences, and preventing the gouty matter from fixing, proved the deſtruction of thoſe who took it *."

But

* Page 79.

But this is all theoretical, and by no means agreeable to the account we have of its effects from accurate obſervers. No ſymptoms of a conſtant fever were obſerved among thoſe who uſed it; but, on the contrary, they were found to enjoy a remarkably good ſhare of health, and at laſt almoſt all died, not of a fever, nor of any conſequences that could be deduced from thence, but ſuddenly, of an apoplexy or palſy *.

It muſt, be acknowledged, that Cœlius Aurelianus mentions, that ſome of thoſe who took this medicine died pleuritic †, or peripneumonic, as well as apoplectic; but it is poſſible that the effects of the medicine might be different in a warm climate, ſince no ſuch were here obſerved from it. Moreover, we do not exactly know the compoſi-

tion

* Some are ſaid to have died of a hydrops pectoris, occaſioned probably by the medicine, (vide Van Swieten, p. 365. vol. IV.) and the ſame effect ſeems hinted at by Cœlius Aurelianus. Lib. V. c. II.

† Cœl. Aur. lib. V. cap. II.

tion of the medicine referred to by Cœlius Aurelianus. From the name *Dia Centaurion*, from its effects, and our knowledge that ſuch medicines were, at that time, in vogue for the gout, we may, with great certainty, conclude that it was of this kind *; but we know not, as the compoſitions varied, whether ſome of them might not contain ſome other heating ingredients, to which theſe effects might, with more probability, be attributed.

Nor have other remedies, as the Doctor obſerves, proved more ſucceſsful.

ANTIMONIAL

* The Portland powder is compoſed of

Birthwort—Ariſtolochia rotunda } root.
Gentian — — }

Germander,
Ground Pine, } tops and leaves.
Centaury,

Take of theſe dried, powdered, and ſifted, equal parts. Doſe, one drachm every morning for three months; three-fourths of a drachm for three months longer; and one-half of a drachm for ſix months more.

The pulvis arthirticus amarus, of the Paris Pharmacopœia, is the ſame, only adding the rhapontic root.

ANTIMONIAL and mercurial preparations, ſo efficacious in many complaints, were here found rather injurious than beneficial, and ſeveral of the narcotic plants, from which ſo much was expected, and of which we had ſuch pompous accounts, on trial were found of no ſervice.

THOUGH I may differ from Dr. Cadogan in ſome particulars, I perfectly agree with him in this general maxim, that the relief, or cure of this diſorder, ought to be attempted more by a regulation of the manner of life *, than the adminiſtration of medicines; which, nevertheleſs, as he very properly remarks, may often be of conſiderable ſervice in palliating the ſymptoms.

IN this general view, the remedies he recommends, viz. activity, temperance, and peace

* Primum monendi ſunt podagrici ne ullo modo corpus medicamentis affligant, ſed rectâ victus ratione et mediocri diligentiâ, articulorum dolores vitari poſſe ſibi perſuadeant—Crato.—Vide Hoffman, tom. 2. p. 345.

peace of mind, are undoubtedly the moſt efficacious, as well as obvious. But in this I am apt to think, that all practitioners, and, indeed, all the world, have been long agreed. It is only in particulars that they differ; and, in this reſpect, I, among the reſt, beg leave to make a few remarks on the caſe which he deſcribes, and his treatment of it. As to the caſe, we may judge, indeed, of it, ſo far as to allow, with him, that it is as bad a one as we need propoſe; but certainly it is not drawn up ſufficiently full and accurate, to draw from thence any material or particular indications of cure. It is not even mentioned, whether the ſeat of the violent raging pain, which he ſeems ſo much to make it an indication to aſſuage, be in the extremities or no, though, from what follows, we may infer, though not certainly, that ſuch is his meaning. Nothing at all is ſaid of his habit of body, or former mode of life; circumſtances very neceſſary to be conſidered in the direction of medicines. I allow, with him, indeed, that if the point

be to abate the pain in the extremities, the method he has adviſed, is very likely to have this effect *; but I am very doubtful if, in theſe circumſtances, it can be a proper indication. Sydenham, whoſe authority ought to be of great weight, as having had ſo much experience of the diſorder, and likewiſe of the bad effects of this practice, expreſsly † condemns the uſe of purgatives altogether. Some writers of eminence, it muſt be confeſſed, have, on the other hand, maintained

* Obſervandum eſt enim quod purgatione currente, æger vel non omnino, vel remiſſé admodum, dolet. Sydenham de podagrâ.

† Ego certe perſuaſiſſimus ſum a jugi et ſæpe iteratâ experientiâ edoctus Catharſin omnem tum per lenientia tam per fortiora qualia pro more articulis expurgandis deſtinantur plurimum nocere; ſive in paroxyſmo ad minuendam materiam peccantem ſive in fine ad diſſipandas morbi reliquias ſive in perfecta intermiſſione et recta valetudine ut venturo paroxyſmo occurratur purgation in uſum revocetur. Etenim tam mei ipſius quam aliorum periculo compertiſſimum habeo Catharſin quovis horum temporum adminiſtratam ita parum votis reſpondiſſe ut malum quod debuerat averruncare atque avertere, accerſeret.—Sydenham, p. 447. De podagrâ.

tained the utility of cathartic medicines in this diſorder. Cheyne adviſes them to be taken during the intervals, but expreſsly prohibits their uſe during the paroxyſm. Hoffman, indeed, has recommended them at the beginnning of the fit; but all concur in this, that their uſe ought to be confined to thoſe caſes wherein the *Vis Vitæ* is too ſtrong, (as ſometimes happens, when the ſubject is in the prime of life, and of a bilious temperament) but that they are univerſally injurious, and, even dangerous, where that is deficient, as contributing to weaken what ought to be the intention to preſerve as much as poſſible. But, if I apprehend the preſent caſe rightly, there ſeems to be greater probability, that the patient would ſtand in need of cordial and ſtimulant, than antiphlogiſtic, or evacuating medicines. By the foregoing account, he appears to be in the decline of life, and probably his conſtitution much injured, and his ſtrength impaired, which will not be unreaſonable to ſuppoſe, (in a caſe confeſſedly bad) from

having undergone, at leaſt, twenty paroxyſms. That ſuch an attempt would alleviate his pain, I have no doubt; but Sydenham cautions, in the ſtrongeſt terms, againſt truſting ſuch a deceitful relief; and, I acknowledge, that, in ſuch a caſe, I ſhould be ſo far from wiſhing to alleviate an acute fit of the gout in the extremities, that I ſhould deſire to encourage it, by proper means, as much as poſſible *, and look upon it as the moſt fortunate circumſtance that could happen. The beſt modern practitioners, I think, never go farther than to obviate a great degree of coſtiveneſs, (which ſometimes happens from confinement during the paroxyſm) by a gentle glyſter, and very ſeldom uſe purgatives, taken internally, while the gout remains in the extremities; and whenever ſuch are neceſſary, ſubjoin an opiate according to Sydenham's direction, to prevent

* Quanto enim magis ægri dolores lenit, tanto magis humorum concoctioni adverſatur, quantoque claudicationem arcet, tanto materiæ morbificæ expulſioni officit. Sydenham de podagrâ.

prevent the metaſtaſis of the gout, from the extremities to the noble parts; ſo that any abatement of the pain, conſequent on ſuch exhibition, would be a circumſtance of which they would be much more fearful, and jealous, than deſirous.

I BEG leave to add here, what a writer of great reputation has ſaid on this ſubject in general: "Si omnia hæc conſiderentur, patebit, non tantum boni a purgantibus et emeticis expectari poſſe, ac quidam vulgó ſolet promitti, imprimis ab agyrtis. Certe paroxyſmi tempore turbant totum corpus, ſi valida fuerint, et impediunt materiæ morboſæ depoſitionem ad loca debita, dum ſimul, liquidiora de corpore educendo, craſſioribus relictis, nocere poſſunt.----Van Swieten. Comment. vol. IV. p. 349.

THE Doctor next recommends, to give, after the exhibition of the purgative, "a few lenient abſorbent * correctors of acrimony, and

* Page 83. Dr. Cadogan.

and even gentle anodynes." I imagine the former part of this advice to be founded on the theory, which he had before adopted, concerning an acid acrimony being the cauſe of the gout. This was the opinion of Hoffman, and of Boerhaave, in conſequence of which, the latter, in order to overcome this tendency, adviſes the uſe of a courſe of alkaline lixivia *. But he ſeems to have altered his opinion afterwards concerning their general uſe, ſince he reſtrains them to ſuch caſes as are not accompanied with bilious † ſymptoms. But, I believe, the preſent practice pays little regard to any indication of this kind, which is deduced only from theory, which does not appear to be well founded. Acidity at the ſtomach, and heartburn, are very frequently troubleſome ſymptoms, during a fit of the gout, but can by no means be ſaid to be the cauſe of the diſorder, ſince they are frequently preſent in

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* Boerhaave's Aphoriſms, § 1275.

† Elem. Chemiæ, tom. II. p. 59.

other complaints that bear not the leaſt affinity to the gout, and may, with much greater probability, be conſidered as the conſequence of a weakened ſtate of the ſtomach, than the original cauſe of the diſeaſe. I do not, by this, mean to deny the utility of abſorbent medicines to relieve the above-mentioned ſymptoms. I am well ſatisfied, that when they appear, that ſuch are highly uſeful, and even neceſſary. But as theſe ſymptoms are not always preſent, and as the only uſe of abſorbents in the gout, is in relieving them, I think that this cannot, with propriety, be eſteemed a general indication.

THE latter part of this paragraph, where the Doctor recommends anodyne medicines, is of more conſequence.

THE uſe of opiate medicines, in the gout, is undoubtedly very great in many inſtances. Sydenham recommends them, as the laſt refuge, in the moſt alarming circumſtances, when the gout attacks the ſtomach; and relates,

relates, that he himſelf was, by this means, recovered from the jaws of death, when all other applications had proved fruitleſs. He likewiſe adviſes their uſe, in caſes where it was found neceſſary to adminiſter cathartic medicines; and ſays, that by giving an opiate, immediately after their operation, he has prevented the metaſtaſis, and other bad effects, which ſo frequently occur, from the exhibition of laxatives, during the paroxyſm.

In caſes likewiſe, where the pain is ſo intolerable as to overcome all patience, Van Swieten (though with ſome reluctance) allows the moderate uſe of opiates, in order to procure a reſpite from the pain, and gain ſome interval of reſt for nature to recover. Opiates, likewiſe, ſeem to be allowed, by all practitioners, to be of great ſervice in procuring reſt in the night, at the decline of the paroxyſm, when, although the pain be nearly gone, the natural ſleep (probably from a habit of being ſo frequently interrupted)

interrupted) does not ſpontaneouſly return.

BUT, although they are undoubtedly of the greateſt ſervice, in the above-mentioned particularly, and probably in many other inſtances of this complaint, yet their uſe requires the utmoſt caution and attention, ſince, if improperly adminiſtered, they are capable of doing the greateſt injury. On this account, it were to be wiſhed, that the Author had been rather more explicit in his directions concerning ſo material an article. If it is to be underſtood to be taken in Sydenham's manner, immediately after the operation of the purgative, it ſeems extremely proper; but if he means it to be exhibited, merely to eaſe the pain, which ſeems more probably his intention, I cannot help thinking ſuch a practice extremely dangerous, on many accounts.

A RELIEF of the pain in the extremities, (as I have before obſerved) ſeems, by no

means, an indication in the preſent inſtance; and though this method would probably effect it, the moſt probable conſequence of ſuch abatement would be a metaſtaſis of the gout, to the head or ſtomach.

HOFFMAN, very properly, cautions againſt truſting to ſuch deceitful circumſtance, which is the more dangerous from the tranſitory reſpite from pain, which it affords, which is ſo enticing, that it demands the greateſt degree of reſolution to lay it aſide, after having once experienced its effects.

'TIS on this account that Van Swieten *, with great judgment, recommends, when opiates may be neceſſary, to conceal, from the

* Si autem intolerabilis dolor opiatorum uſum poſcat ſic tegenda ſunt illa remedia ut æger neſciat ſe illis uti ubi ſemel expertus fuit illud ſolamen, illo nunquam cardere vellet, etiam in motiori dolore.——Podagrici dum ſævos dolores patiuntur ſepius eos ſæpe redimere vellent vitæ etiam periculo unde Medici monita ſpernerent & propio marte opiata remedia ſumerent quod non ſemel contigiſſe novi.——Van Swiet. comment. vol iv. p. 283.

the knowledge of the patient, that any ſuch medicine has been adminiſtred, leſt he, from experience of the eaſe procured by it, might be tempted to uſe it too frequently. I knew an inſtance myſelf, of a perſon, who, from having once experienced a relief of this kind from opiate medicines, in a very ſevere paroxyſm, could not ſum up reſolution ſufficient :o lay them aſide when the pain became moderate, although he was fully convinced, that he injured his health greatly by ſuch a practice. On this account, I fear that a late publication, by a reverend divine, has done infinite miſchief, as he has adviſed, and encouraged, the uſe of opiates in ſo many inſtances; and, with ſo little preciſion, that every perſon, in pain from the gout, might eaſily adapt his caſe to his directions, and plead his authority, in order to deceive himſelf into the propriety of making uſe of ſo flattering, though treacherous remedy.

NOR is the next piece of advice, which the Doctor gives, concerning the uſe of cataplaſms, or external applications, in order to abate the pain, leſs liable to objection. The Doctor, indeed, has guarded his expreſſion, by inſerting the word *proper*; but, I believe, the beſt practitioners are all agreed, that every external application, that has this effect, muſt be highly prejudicial. Sydenham, who profeſſed to have had great perſonal experience in this way, declares altogether againſt the uſe of topical applications; and * Hoffman, † Van Swieten, and indeed all the beſt modern practitioners, concur in opinion, that they are ſcarce ever ſerviceable, but frequently noxious, when applied to the pained part, at a time when the gout is in the extremities.

VAN SWIETEN § relates ſeveral inſtances of bad, and even mortal, conſequences following

* Sect. 2, cap. 11. vol. iv.

† P. 357, vol. iv.

§ Ibidem, p. 357.

lowing an alleviation of the gouty paroxyſm, procured by theſe means, and remarks, of thoſe who eſcaped with life, that their limbs were ſubject to become rigid * much ſooner than thoſe of ſuch people who had not been accuſtomed to uſe them.

I DO not mean to aſſert, that an alleviation of the pain of a gouty paroxyſm, is never an indication in phyſic; but I am apt to think, that incautious people may fall into a very dangerous error, in concluding from what is laid down in Dr. Cadogan's Diſſertation, than to alleviate the pain, is oftener an indication, than it really is. I heartily wiſh, therefore, that the advice of Van Swieten was more attended to, where he ſays, "Magnâ prudentiâ opus eſt ut tutó leniri poſſunt podagræ ſymptomata."

THE remainder of the paragraph, which contains his directions, principally concern-

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* P. 387, vol. iv. comment.

ing the manner of life proper to be followed during the fit, ſeems, in general, extremely reaſonable; and he has, with great propriety, condemned a very common, tho' dangerous practice, of uſing a larger proportion of ſpirituous liquors, and other ſtimulant ſubſtances, during the time of the paroxyſm, than they were before accuſtomed to, under a notion of preventing the metaſtaſis of the gout to the vital parts; where, as he obſerves, when it rages in a diſtant part, it is not inclined to come.

But as theſe ſubſtances, when taken in too great quantity, after their ſtimulant operation is over, always leave the ſtomach in a weak and debilitated ſtate, and impair the nervous ſyſtem greatly, on the ſtrength of which the continuance of the gout, in its proper ſituation, (the extremities) moſtly depends; it is obvious, that ſuch a practice, ſo far from being likely to anſwer the end propoſed, would be the moſt likely thing poſ-

ſible

ſible to invite it to the part where its preſence was ſo much dreaded.

SYDENHAM's direction, with whom Dr. Cadogan ſeems to agree in this reſpect, appears the beſt. While the inflammatory diatheſis laſted, he adviſed abſtinence from wine and fleſh meats; but as ſome ſtomachs, eſpecially thoſe who are in the decline of life, will not bear ſuch a rigorous abſtinence, he admitted the uſe of each, in ſmall quantity, but with the greateſt caution not to exceed in either, and to take no more than ſhould be found neceſſary to ſupport nature.

TOWARDS the decline of the fit, and if the patient be advanced in years, or much weakened, it ſhould ſeem adviſeable to allow, a more free uſe of ſubſtances of this kind, particularly fermented liquors; but, nevertheleſs, with the greateſt care not to exceed the moſt moderate quantity to which he had been daily accuſtomed in health.

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THE Doctor next proceeds to the moſt important part of his diſſertation, viz. " the prevention of the return of the gout, or its change into any other diſorder, and to eſtabliſh health."

THE rational part of the faculty will, I believe, readily concur with the Doctor, in the firſt general maxim he lays down, viz. " that the cure of the gout is not to be expected from a courſe of medicines, and that all the modes of practice, which have been employed for that purpoſe, which he enumerates, and are principally of the evacuatory kind, have been ineffectual;" and, I would add, moſt of them prejudicial.

HAVING laid down this poſition, he next goes on to deſcribe the plan of life, which he would recommend in the inſtance above deſcribed, and which he promiſes ſhall be effectual for ever to prevent the return of his complaint, and ſo confirm his general

health,

health, that it ſhall not again be overſet by every cold or trifling accident *.

THE firſt and principal remedy, which he recommends, in order to accompliſh ſo great a change, is EXERCISE.

THE uſe of this, in the gout, has been ever acknowledged by all, and accordingly adviſed, in the ſtrongeſt terms, by every writer ſince the inſtitution of medicine; and there are few of thoſe, who are afflicted with the gout, ſo ignorant as not to be acquainted with this, without aſking the advice of a phyſician. Friction, likewiſe, which the Doctor recommends, as a ſubſtitute for exerciſe when the patient is unable to bear motion, † Van Swieten adviſes it in the

 ſtrongeſt

* Page 85.

† Frictiones autem inſignem utilitatem habent, ſi applicentur partibus, quæ paroxyſmi podagrici tempore dolere ſolent. Certus ſum, pluribus experimentis, ingens levamen ſemper ſecutum fuiſſe, ſi impetrare potuerim, ut diligenter his uterentur ægrimane & veſperi, imprimis in pedibus, quos frequentius

morbus

ſtrongeſt manner, and there can be no doubt of its utility.---The Doctor's ſubſequent advice, concerning exerciſe, and the manner of uſing it, is extremely good; and he has certainly ſhewn great judgment in being ſo preciſe in his directions, and laying ſo much ſtreſs on this circumſtance, which many, from its ſimplicity and ſlow operation, would be apt to neglect. He has very ſtrongly inculcated a moſt uſeful maxim to ſuch people, not to be content with the ſtrength they have already acquired by theſe means, but to employ it to get more, and never to reſt ſatisfied with what is already gained: But although the Doctor lays ſo great ſtreſs on exerciſe, he allows that its good effects may be greatly promoted and aſſiſted by medicines.

morbus aggreditur. Ne ſimplicitas remedii contemptum pareret, pannos laneos ſuffumigi quodam aromatico imbui juſſi, vel et molle aliquod unguentum, adhibui: tamen, ut vera fatear, a ſola frictione eundem effectum vide; ſi mane et veſpere per quadrantem horæ quotidie adhiberetur.——Van Swieten commen. vol. iv. p. 374.

It were to be wiſhed, that Dr. Cadogan had been more explicit in this reſpect, ſince his expreſſion of * "mild antimonial abſorbent, and ſaponaceous deobſtruents, and ſweetners," give a very vague and uncertain idea.

Antimonial medicines I have beforementioned to have been found unſucceſsful in this diſorder; and though ſome circumſtances may perhaps require ſomething of this kind, they are by no means a general indication, ſince, when taken long together, they injure the ſtomach very much, which is a circumſtance of the moſt immediate concern. As to the other ſubſtances which the Doctor adviſes, I confeſs I do not underſtand what he means, ſufficiently to make any remarks on the propriety of their uſe: But, to make amends for this obſcurity, the Doctor, in the next paragraph, comes nearer to the level of common underſtandings, when he illuſtrates the propriety of the uſe

* Page 88.

of exerciſe and medicine, by a compariſon drawn from cleaning bottles with ſhot or gravel, which, with agitation, will have that effect; but without that, will do nothing.

But, what opinion muſt Dr. Cadogan have of the capacity of his readers, when he made the above compariſon? Is any perſon weak enough to believe, that the operation of medicines, on the human body, bears any analogy to cleaning a bottle with ſhot or gravel; or that exerciſe promotes their effect in this way, in the ſame manner that agitation does in the other? What proof have we that the human body requires any ſuch ſcouring or cleaning; or, if it did, that it could be brought about by an * antimonial medicine,

* The Vinum Antimonii, which, as Huxham obſerves, is capable of having every effect of any antimonial preparation, contains a portion of antimony inconceivably ſmall.---An ounce of Crocus Metallorum, or Vitrum Antimonii, put into a hogſhead of wine, will impart to it all an emetic quality; and yet the antimony when taken out, will not be ſo ſenſibly diminiſhed in weight, as to be diſcoverable by the niceſt balance;

cine, which does not amount to the thouſandth part of a grain in weight. Such illuſtrations, however plauſible to the vulgar, can ſcarce be ſeriouſly brought into argument. Were we to purſue the ſubject, we might add, that ſaponaceous ſubſtances muſt be here of eſpecial ſervice, ſince a little ſoap, added to the ſhot or gravel, muſt needs aſſiſt its operation in cleaning the bottle, in the inſtance juſt mentioned. I am far from meaning to deny the utility of exerciſe, in promoting the effect of medicines. but only object to this extraordinary illuſtration of their mode of action.

The next material circumſtance which the Doctor conſiders, is the proper food of the patient. This, he ſays, "ſhould be ſoft, mild, and ſpontaneouſly digeſting, and in moderate quantity, ſo as to give the leaſt poſſible labour to the ſtomach and bowels, that

lance; and will afterwards impregnate any quantity of wine in the ſame manner. When taken as alterative, one dram or a ſmall tea ſpoonful is a doſe.

that it may neither turn ſour nor bitter, nor rancid, nor any way degenerate from the qualities neceſſary to make good blood." Theſe directions are undoubtedly good in general; but I fear ſome of the particular things he recites, as poſſeſſing theſe qualities, will ſcarcely anſwer to this character. Tripe, for inſtance, calves feet, chicken, are leſs ſoluble, in the ſtomach, than beef or mutton, which are of a more compact and firm texture. Dr. Robinſon, of Dublin, has proved that food, of a ſeemingly firm texture, is of eaſier ſolution than that which is more looſely compacted, but which contains a more viſcid juice. This is found in much larger quantity in the ligamentous, membranous, and tendinous parts, than in the muſcular. This quality of difficult ſolution, is owing, in ſome meaſure, to the leſſer degree of alcaleſcency, which the viſcid parts of animals poſſeſs, which is the great promoter of the ſolubility of our food in the ſtomach. Perhaps, the difficulty of digeſtion of the fleſh of young animals, is owing to the ſame

cauſe,

cauſe, as they contain a much larger proportion of gelatinous matter, than the old; and are likewiſe much leſs alcaleſcent.*

If then the wholeſomeneſs of our foods depends ſo much on its being in a periſhable ſtate, on which circumſtance the Doctor lays ſo great ſtreſs, beef, mutton, or grown up fowls, would be more proper diet for a weak ſtomach, than tripe, calves feet, chicken, or any kind of the white fiſh he mentions, which are particularly remarkable for their viſcid and glutinous quality. The obſervation of Dr. Robinſon, cited in the note, ſhews, that this advice has a foundation in experience, as well as theory.

The next material circumſtance that he mentions, relative to our dit, is, his prohibition of wine. I have before declared my ſentiments with regard to the propriety of

* Dr. Robinſon, of Dublin, obſerved of thoſe who were ſubject to ſpit up their food, that this happened much more remarkably when the fleſh of young animals was taken, than full grown meat.

of the uſe of wine in our diet, moderately taken; and, in the inſtance before us, I am well ſatisfied that ſomething of this kind muſt be eſpecially neceſſary. Sydenham, who was a great advocate for abſtinence from wine, in this diſorder, particularly excepts caſes ſimilar to this, and declares, that ſuch a change of diet has deſtroyed a great number of people. He himſelf experienced the bad effects of a ſudden change of diet of this ſort, which had nearly put an end to his life; and I believe there are few modern practitioners who have not ſeen inſtances of the ſame kind. But Dr. Cadogan ventures to ſtake his life upon the ſafety of the experiment, even if the change was ſuddenly made; and I verily believe, that there are few of thoſe who have made the trial, who can perſonally contradict his aſſertion.

The Doctor next proceeds to give ſome rules concerning diet, which are, indeed, principally a recapitulation of his former general maxims of moderation in our food,

and

and the proper choice of it; to which I have before ſpoken. I cannot, nevertheleſs, omit to take notice of ſome particulars concerning the diet he recommends, particularly, where he ſays our food is more wholeſome, the leſs liquid is taken with it. I confeſs I can ſee no reaſon for this maxim, or why the proportion of drink ſhould not be meaſured by the thirſt as well as the quantity of food by hunger. Moderation in both meat and drink is undoubtedly proper, but I believe that an exceſs in quantity of drink is generally thought leſs noxious than in ſolid food. To reaſon on the ſubject would much exceed the limits of this work; but to ſupport what I have advanced, I beg leave to quote the words of a great Phyſiologiſt of the preſent age, who ſays, " Magis in cibo minus inpotu peccatur cujus major portio poſſit quaſi infundi quia ventriculo non retinetur. ---Et in univerſum varia quidem in variis,

potus ad cibum ratio eſt*, ut tamen potus conſtanter ſuperet§."

THE remainder of the directions, relative to the regulating our lives, contain nothing new or particular.---Moderation, in the quantity of our food, and a choice of ſuch as eaſily digeſted, conſtant exerciſe, good hours, and the uſe of the pediluvium frequently, are the ſum of it; and to the propriety of theſe, I believe every one will ſubſcribe.

I HEARTILY wiſh I could ſay, with equal confidence with Dr. Cadogan, that theſe rules would be efficacious to the cure of chronic diſorders, the gout eſpecially; but I fear our illuſtrious countryman, Dr. Sydenham, will be found a notable inſtance, that the moſt judicious manner of life, and the greateſt temperance, (though the beſt means in our hands) cannot inſure us from the attacks of this

* The mean computation of the proportion of drink to ſolid meat, ſeems to be nearly as five to two.

§ *Halleri Phyſiolog. Vol* vi. p. 562.

this obſtinate and cruel diſorder.----I muſt now take my leave of Dr. Cadogan, and hope I may be permitted to expreſs the ſame ſentiment with him in plea for what I have advanced, viz. " that if I have hazarded any thing contrary to ſo great authority, it has been from a conviction of its truth." For the freedoms I have taken, I hope I may be believed, when I declare, I mean nothing perſonal; and as to what I have ſaid concerning his opinions relative to the ſubject, I beg leave to make my defence in the words of a diſtinguiſhed moraliſt of the preſent age:—* " The faults of a writer of acknowledged excellence are more dangerous, becauſe the influence of his example is more extenſive; and the intereſt of learning requires that they ſhould be diſcovered and ſtigmatized, before they have the ſanction of antiquity conferred upon them, and become precedents of indiſputable authority."

* Rambler, No. 93.

F I N I S.